

FIG. 2

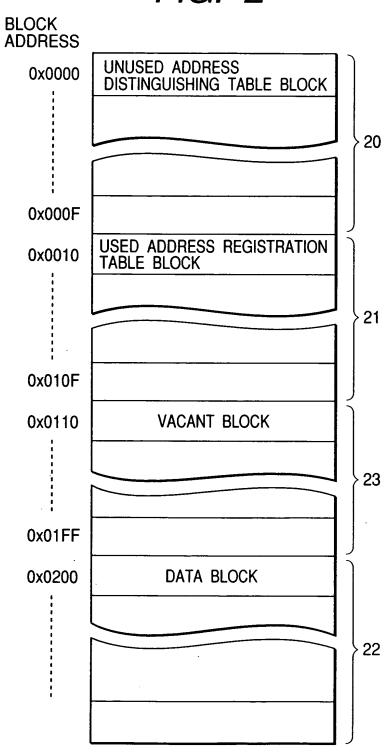


FIG. 3

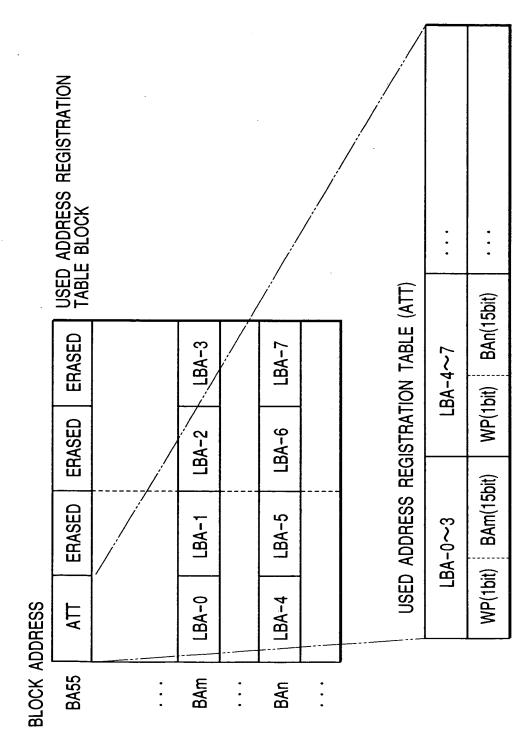
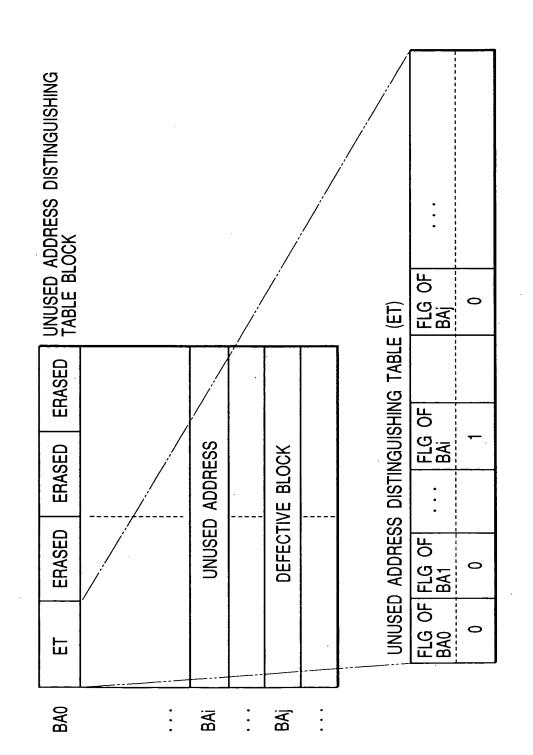
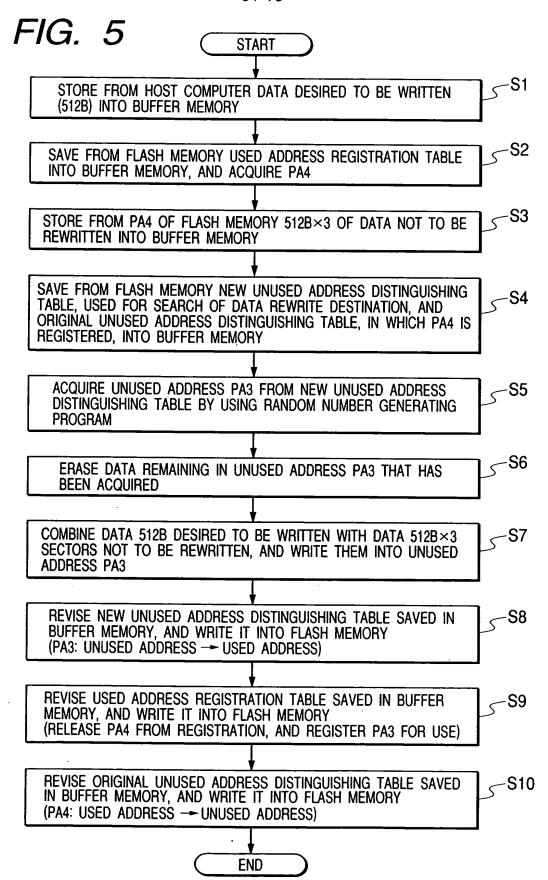
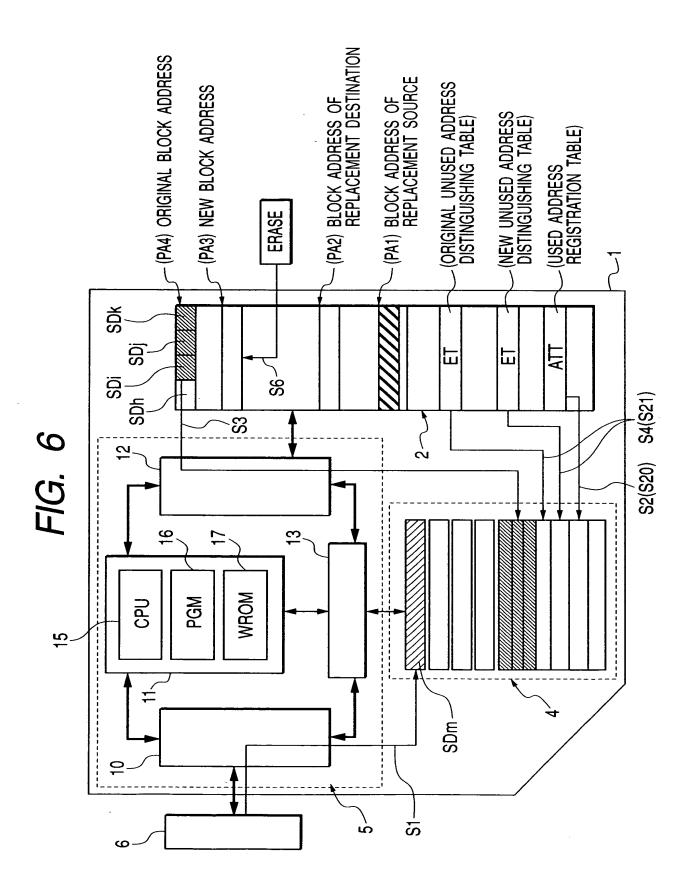
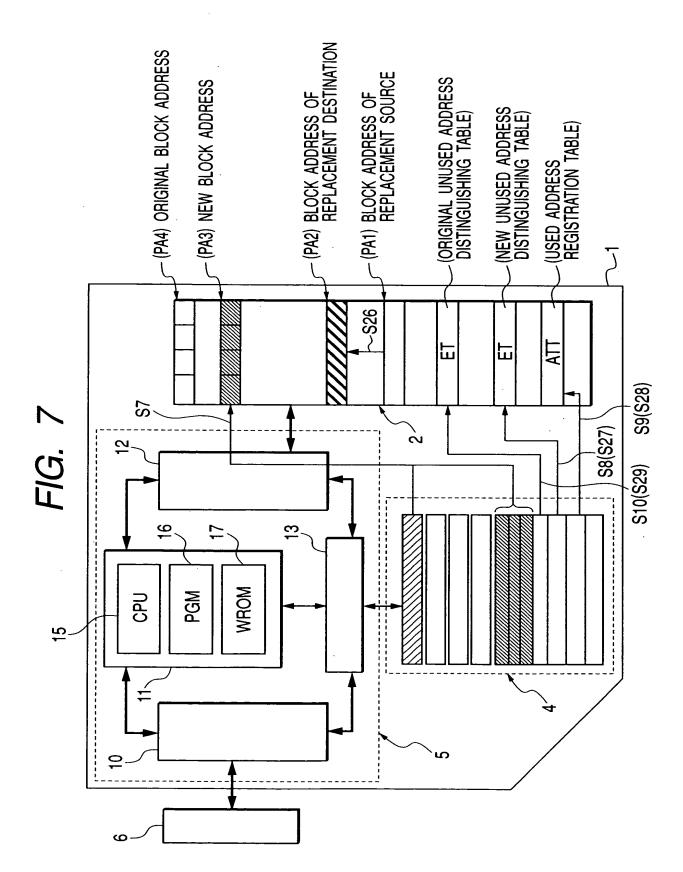


FIG. 4









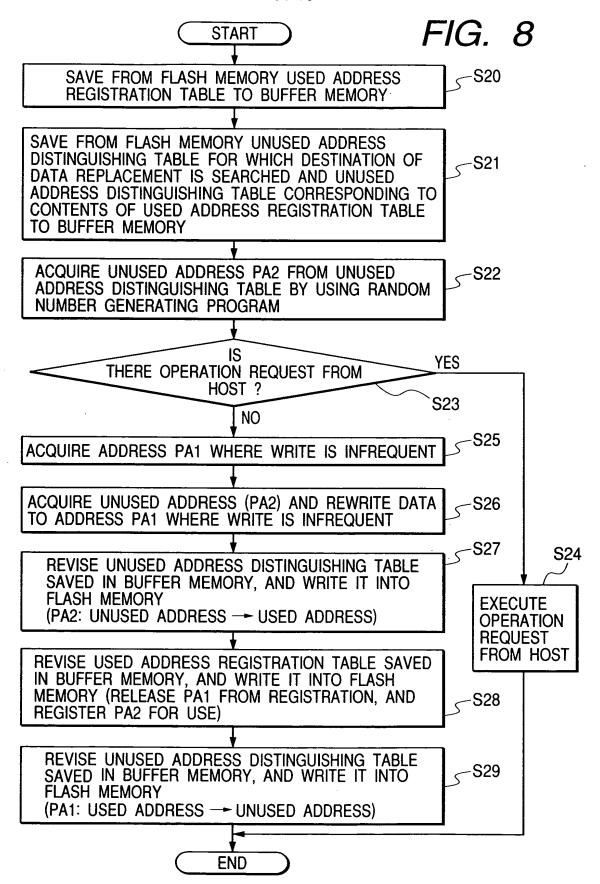


FIG. 9

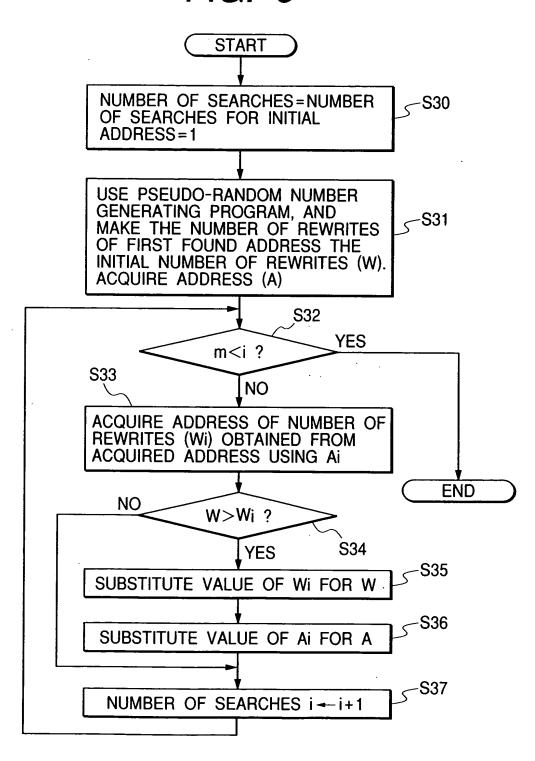
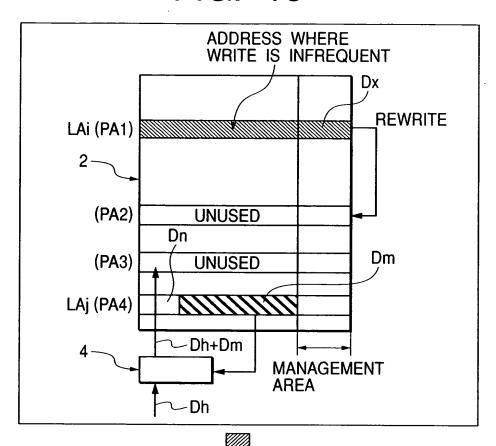
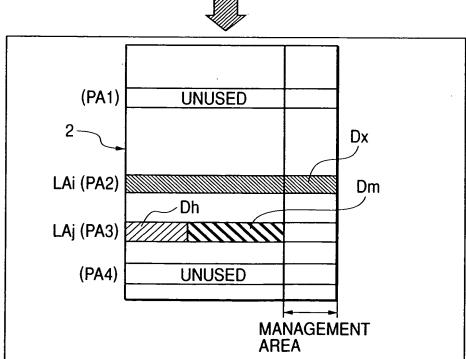


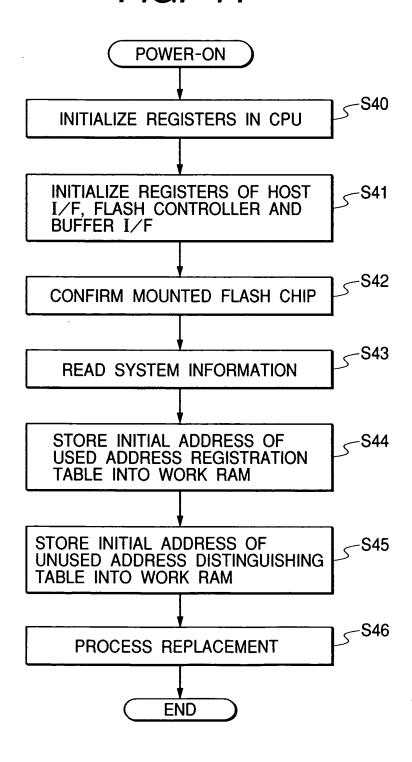
FIG. 10

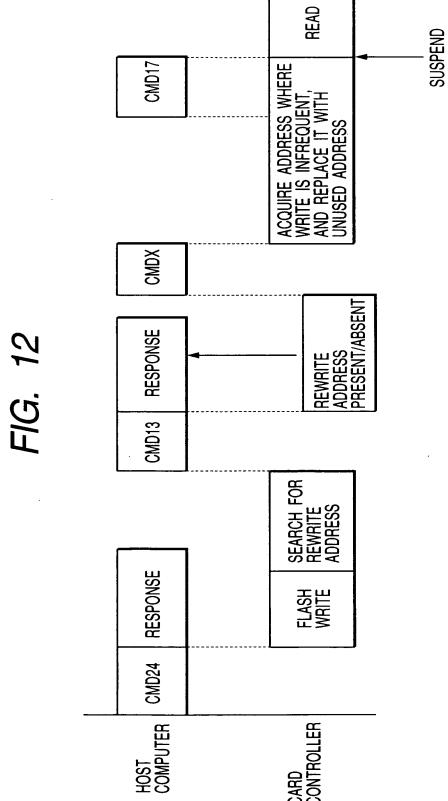




. . . .

FIG. 11





	13 / 16	
FIC	3. 13 START	
	STORE FROM HOST COMPUTER DATA DESIRED TO BE WRITTEN (512B) INTO BUFFER MEMORY	S 1
-	SAVE FROM FLASH MEMORY USED ADDRESS REGISTRATION TABLE INTO BUFFER MEMORY, AND ACQUIRE PA4	S2
	ACQUIRE NUMBER OF DATA WRITES FROM USED ADDRESS REGISTRATION TABLE (w)	S50
+		-
(1) -	NO SET NUMBER OF WRITES=W ?	
	S5	1
1	YES STORE FROM PA4 OF FLASH MEMORY 512B×3 OF DATA NOT TO	_S3
	BE REWRITTEN INTO BUFFER MEMORY	3
,		
	SAVE FROM FLASH MEMORY NEW UNUSED ADDRESS DISTINGUISHING TABLE, USED FOR SEARCH OF DATA REWRITE DESTINATION, AND ORIGINAL UNUSED ADDRESS DISTINGUISHING TABLE, IN WHICH PA4 IS REGISTERED, INTO BUFFER MEMORY	<u></u>
·		
	ACQUIRE UNUSED ADDRESS PA3 FROM NEW UNUSED ADDRESS DISTINGUISHING TABLE BY USING RANDOM NUMBER GENERATING PROGRAM	S5
·		S 6
	ERASE DATA REMAINING IN UNUSED ADDRESS PA3 THAT HAS BEEN ACQUIRED	500
	COMBINE DATA 512B DESIRED TO BE WRITTEN WITH DATA 512B×3	_S7
	SECTORS NOT TO BE REWRITTEN, AND WRITE THEM INTO UNUSED ADDRESS PA3	501
	<u> </u>	00
	REVISE NEW UNUSED ADDRESS DISTINGUISHING TABLE SAVED IN BUFFER MEMORY, AND WRITE IT INTO FLASH MEMORY (PA3: UNUSED ADDRESS - USED ADDRESS)	S8
	REVISE USED ADDRESS REGISTRATION TABLE SAVED IN BUFFER MEMORY, AND WRITE IT INTO FLASH MEMORY (RELEASE PA4 FROM REGISTRATION, AND REGISTER PA3 FOR USE)	S9
·	+	
	REVISE ORIGINAL UNUSED ADDRESS DISTINGUISHING TABLE SAVED IN BUFFER MEMORY, AND WRITE IT INTO FLASH MEMORY (PA4: USED ADDRESS)	S10
'		•

FIG. 14 _S53 COUNT NUMBER OF WRITES -S20 SAVE FROM FLASH MEMORY USED ADDRESS REGISTRATION TABLE TO BUFFER MEMORY SAVE FROM FLASH MEMORY UNUSED ADDRESS S21 DISTINGUISHING TABLE FOR WHICH DESTINATION OF DATA REPLACEMENT IS SEARCHED AND UNUSED ADDRESS DISTINGUISHING TABLE CORRESPONDING TO CONTENTS OF USED ADDRESS REGISTRATION TABLE TO BUFFER MEMORY S22 ACQUIRE UNUSED ADDRESS PA2 FROM UNUSED ADDRESS DISTINGUISHING TABLE BY USING RANDOM NUMBER GENERATING PROGRAM S25 ACQUIRE ADDRESS PA1 WHERE WRITE IS INFREQUENT S26 ACQUIRE UNUSED ADDRESS (PA2) AND REWRITE DATA TO ADDRESS PA1 WHERE WRITE IS INFREQUENT REVISE UNUSED ADDRESS DISTINGUISHING TABLE S27 SAVED IN BUFFER MEMORY, AND WRITE IT INTO FLASH MEMORY (PA2: UNUSED ADDRESS → USED ADDRESS) REVISE USED ADDRESS REGISTRATION TABLE SAVED ~S28 IN BUFFER MEMORY, AND WRITE IT INTO FLASH MEMORY (RELEASE PA1 FROM REGISTRATION, AND REGISTER PA2 FOR USE) REVISE UNUSED ADDRESS DISTINGUISHING TABLE S29 SAVED IN BUFFER MEMORY, AND WRITE IT INTO FLASH MEMORY (PA1: USED ADDRESS → UNUSED ADDRESS) (3)END

FIG. 15

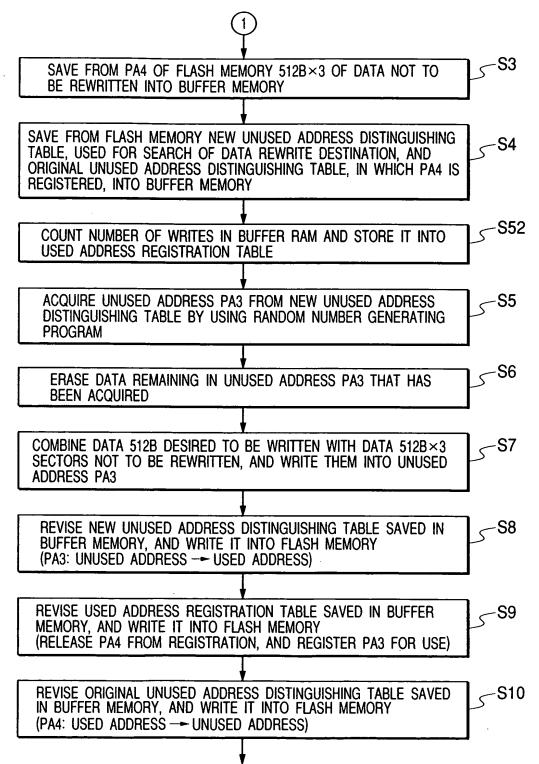


FIG. 16

